RESONANCE FREQUENCY SHIFT CANCELING IN WIRELESS HEARING AIDS

Abstract of the Disclosure

5 Systems, devices and methods are provided to switch between transmit and receive modes in wireless hearing aids. Various aspects of the present subject matter relate to a communication system. Various embodiments of the communication system include an antenna with a resonant circuit having an inductive coil connected to a tuning capacitor. The communication system includes 10 means to selectively drive the resonant circuit during a transmit mode, and means to selectively receive an induced signal in the resonant circuit during a receive mode. The communication system further includes means to selectively include a frequency shift canceling component in the resonant circuit to provide a first resonance frequency in the resonant circuit in the transmit mode and a second 15 resonance frequency in the resonant circuit in the receive mode such that the first resonance frequency and the second resonance frequency are approximately equal. Other aspects are provided herein.

"Express Mail" mailing label number: <u>EV299684839US</u>
Date of Deposit: <u>November 26, 2003</u>

This paper or fee is being deposited on the date indicated above with the United States Postal Service pursuant to 37 CFR 1.10, and is addressed to the Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.